1. (currently amended) A method to wirelessly communicate data over a plurality of cellular channels, comprising:

requesting an allocation of preferably adjacent cellular frequency channels from a mobile station to a base station;

allocating available frequency channels in response to the request from the mobile station; and

bonding the available frequency channels to communicate data; and

bonding a short-range radio channel to the cellular frequency channels; and

communicating over the bonded cellular and radio channels using short-range

radio protocol and cellular protocol.

- (Withdrawn) The method of claim 1, further comprising communicating on a short-range radio channel.
- (original) The method of claim 2, wherein the short-range radio channel is Bluetooth or WLAN (802.11x).
- 4. (original) The method of claim 2, further comprising bonding the short-range radio channel with the cellular frequency channels to increase bandwidth.
- (original) The method of claim 1, wherein the cellular channels comprise an uplink band around 890 - 915 MHz and a downlink band around 935 - 960 MHz.
- (original) The method of claim 5, further comprising bonding over two adjacent channels.

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  - 7. (original) The method of claim 5, wherein each band is divided into 124 pairs of frequency duplex channels with 200 kHz carrier spacing using Frequency Division Multiple Access (FDMA).
  - 8. (original) The method of claim 5, further comprising: splitting the 200 kHz radio channel into a plurality of time slots; bonding the time slots; and transmitting and receiving data in the bonded time slots.
  - 9. (original) The method of claim 5, further comprising splitting the 200kH2 radio channel using time division multiple access (TDMA).
  - 10. (original) The method of claim 5, further comprising transmitting cellular packet data conforming to one of the following protocols: cellular digital packet data (CDPD) (for AMPS, IS-95, and IS-136), General Packet Radio Service (GPRS) and EDGE (Enhanced Data for Global Evolution).
  - 11. (currently amended) A reconfigurable processor core, comprising: one or more processing units:
  - a long-range transceiver unit coupled to the processing units, the long-range transceiver unit communicating over a plurality of cellular frequency channels; a short-range transceiver coupled to the processing units; and means for bonding a plurality of channels using cellular protocol and short-range protocol.
    - 12. (original)The processor core of claim 11, wherein the reconfigurable processor core includes one or more digital signal processors (DSPs).

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- 13. (original) The processor core of claim 11, wherein the reconfigurable processor core includes one or more reduced instruction set computer (RISC) processors.
- 14. (original) The processor core of claim 11, further comprising a router coupled to the one or more processing units.
- 15. (original) The processor core of claim 11, wherein the short-range transceiver communicates over a short-range radio channel, further comprising means for bonding the short-range radio channel with the cellular frequency channels to increase bandwidth.
- 16. (original) The processor core of claim 11, wherein the cellular channels comprise an uplink band around 890 - 915 MHz and a downlink band around 935 - 960 MHz.
- 17. (original) The processor core of claim 11, further comprising means for bonding over two adjacent cellular channels to interleave the channels.
- 18. (original) The processor core of claim 11, further comprising: means for splitting the 200 kHz radio channel into a plurality of time slots; means for bonding the time slots; and means for transmitting and receiving data in the bonded time slots.
- (original) The processor core of claim 11, further comprising means for splitting the 200kHz radio channel using time division multiple access (TDMA).
- 20. (original) The processor core of claim 11, further comprising means for transmitting cellular packet data conforming to one of the following protocols:

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cellular digital packet data (CDPD) (for AMPS, IS-95, and IS-136), General Packet Radio Service (GPRS) and EDGE (Enhanced Data for Global Evolution).